

Trunked P25 Features Matrix User List

- 10/25/2007 -

M = Mandatory
SO-R = Standard Option Required
SO = Standard Option



Feature Name	Requirement Level	Standards Documents	Comments
Voice Calls			
Group Voice Call	M	102A, AABC-B, AABD	May also be referred to as Unit to Group Call
Individual Voice Call	M	102A, AABC-B, AABD	May also be referred to as Unit to Unit Call
Broadcast Voice Call	M	102A, AABD	
Discreet Listening	SO	102A	
Call Interrupt	SO	102A	
Announcement Group Call	SO	AABC-B, AABD	
System Call	SO	AABC-B, AABD, CABA, BAAD	May also be referred to as (ALL) System Call, System Wide TG Call
Mobility Management			
Roaming	M	102A, AABC-B, AABD	
Intra-System Roaming	M	102A, AABC-B, AABD	May also be referred to as Roaming
Inter-System Roaming (Manual)	M	102A, AABC-B, AABD	May also be referred to as Intra-WACN Roaming
Inter-System Roaming (Automatic)	SO	102A, AABC-B, AABD	May also be referred to as Intra-WACN Roaming
Inter-WACN Roaming	SO	102A, AABC-B, AABD, AABF-A-2	May also be referred to as Roaming
Registration	M	102A, AABC-B, AABD	
Authentication (Implicit)	SO	AABC-B, AABD	May also be referred to as Authentication, (Assumed) Authentication
Link Layer Authentication	SO	AACE	
Affiliation	M	102A, AABC-B, AABD	May also be referred to as Group Affiliation
De-Registration	M	AABC-B	
Encryption			
Block Encryption	SO	AAAD, AACA	May also be referred to as Encryption or Encrypted Audio
DES-OFB Encryption of Voice	SO	102A, AAAD	For Backward compatibility only. Not encouraged for new systems
DES-OFB Encryption of Packet Data	SO	102A, AAAD	For Backward compatibility only. Not encouraged for new systems
AES Encryption of Voice	SO	AAAD	
AES Encryption of Packet Data	SO	AAAD	
Multiple Encryption Algorithms	SO	AAAD, AACA	
Multiple Encryption Keys	SO	AAAD, AAAAA-A	
Encryption Key Update	SO	102A	May also be referred to as Encryption Update
Over The Air Rekeying (OTAR)	SO	102A, AACA, AACB, AACD	Contains 23 sub-options listed in AACA
Manual Rekeying Features	SO	102A, AACD	12 sub-options listed in AACD. Also referred to as Physical Key Management.
Supplementary Services			
Call Alerting	SO	102A, AABC-B, AABD, AABG, BACD	May also be referred to as Call Alert, Unit Page
Pre-programmed Data Messaging / Short Message	SO	102A, AABD, AABC-B, AABF-A, AABG, AABA-A, BACD	May also be referred to as Short Message, Short Data Message, Message
Silent Emergency	SO	102A, CABA	
Radio Unit Monitoring	SO	102A, AABG, AABC-B, BACD	May also be referred to as Radio Unit Monitor
Emergency Alarm	SO	102A, AABC-B, AABD, AABG, BACD	May also be referred to as Emergency Alert, Emergency Indications, Emergency
Emergency Call	SO	BAAD, AABF-A	May also be referred to as Emergency Group Call
Extended Functions			
Radio Unit Inhibit* / Disable	SO	102A, AABC-B, AABD, AABG	
Radio Unit Uninhibit* / Re-enable	SO	102A, AABC-B, AABD, AABG	
Radio Check	SO	AABD, AABC-B, AABG	
System Services			
Network Status	M	AABC-B, AABD	
System Status	M	AABC-B, AABD	
Channel Identifier	M	AABC-B, AABD	
System Service	SO	AABC-B, AABD	
Adjacent Site Status	SO	AABC-B, AABD	
Secondary Control Channel	SO	AABC-B, AABD	
Composite Control Channel	SO	AABB-A, AABC-B, AABD	
Backup Control Channel	SO	AABC-B, AABD	
Miscellaneous			
Talking Party Identification	SO	102A	May also be referred to as Caller Identification or Caller-ID
Call Restriction	SO	102A	
Priority Call	SO	102A, AABC-B, AABD	May also be referred to as Priority
Preemptive Priority Call	SO	102A	
Call Routing	SO	102A	
Message Trunking	SO	AABA-A	
Transmission Trunking	SO	AABA-A	
Common Air Interface (U_m)			
CAI	M	102A, BAAA-A	

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Phase 1			
Enhanced Full Rate Vocoder	M	102A, BABA	Also referred to as P25 Defined Vocoder: Enhanced Version required in new products
12.5 kHz Channel Bandwidth	M	102A, BAAA-A	
Frequency Division Multiple Access (FDMA)	M	102A, BAAA-A, AABA-A	
C4FM and CQPSK Modulation	M	102A, BAAA-A	Older products may have only C4FM
9.6 kbps Gross Bit Rate	M	102A, BAAA-A	
Backwards Compatibility (Analog FM Operation)	M	102A, ANSI/TIA/EIA-603 Compliance	
Inter RF Sub-System Interface (G)			
ISSI	SO	102A, BACA, BACA-1, BACA-3, BACD	
Voice Services			
Group Voice Service	SO-R	BACA, BACA-1	
SU-to-SU Voice Service	SO-R	BACA, BACA-1	
Mobility Management Functions			
SU Registration	SO-R	BACA, BACA-1	
SU Tracking	SO-R	BACA, BACA-1	
Group Affiliation	SO-R	BACA, BACA-1	
Group Tracking	SO-R	BACA, BACA-1	
Authentication Credential Distribution	SO-R	BACA, BACA-1	
Supplementary Data Services (Include)			
Emergency Alarm	SO-R	BACD, BACA-3	May also be referred to as Supplementary Services
Call Alert	SO-R	102A, BACD, BACA-3	Also referred to as Emergency Alert
Short Message / Pre-programmed Data Messaging	SO-R	102A, BACD, BACA-3	
Status Query	SO-R	BACD, BACA-3	
Status Update	SO-R	BACD, BACA-3	
Radio Unit Monitor	SO-R	102A BACD, BACA-3	
Radio Check	SO-R	BACD, BACA-3	
Radio Inhibit	SO-R	BACD, BACA-3	
Radio Uninhibit	SO-R	BACD, BACA-3	
Data Interfaces (A and E_d)			
Data Interfaces (A and E _d)	SO	102A	
Data Configuration - Radio to FNE	SO	BAEB-A, BAEB, BAEB-2	May also be referred to as Mobile to Fixed Host Service (FNE Data)
Data Configuration - Radio to Radio (Direct)	SO	BAEB-A, BAEB, BAEB-2	May also be referred to as Mobile to Mobile Service (Direct)
Data Configuration - Radio to Radio (Repeated)	SO	BAEB-A, BAEB, BAEB-2	May also be referred to as Mobile to Mobile Service (Repeated Data)
Packet Switched Confirmed Delivery Data	SO	BAEB-A	
Packet Switched Data Network Access	SO	BAEB-A	
RCP (Radio Control Protocol)	SO	BAEE-A, BAEB-A	Used for Radio Management Protocol
SNMP (Simple Network Management Protocol)	SO	BAEE-A, BAEB-A	Used for Radio Management Protocol
SCEP (Simple CAI Encapsulation Protocol)	SO	BAEB-A	
SNDCCP (Subnetwork Dependent Convergence Protocol)	SO	BAEB-A	
Link Layer and Physical Layer Protocols	SO	BAEA-A, BAEB-A	
Telephone Interconnect Interface (E_t)			
Telephone Interconnect	SO	102A, BADA	Contains 33 sub-options listed in BADA. May also be referred to as Voice Telephone
Fixed Station Interface (E_f)			
TBD			
Console Sub-System Interface (E_c)			
Console Sub-System Interface	SO	102A, BACA-2	
Voice Services	SO-R	BACA-2	
Mobility Management Functions	SO-R	BACA-2	
Supplementary Data Services (See ISSI)	SO-R	BACD, BACA-3	May also be referred to as Supplementary Services
Network Management Interface (E_n)			
TBD			